P
Med
T

P78-0019
.(07)

~~DUPLICATE~~ pm

UNIVERSITY OF TORONTO

Faculty
of
Medicine

REPORT OF THE DEAN
OF THE
FACULTY OF MEDICINE

MAR 9 1949
UNIVERSITY OF

SESSION 1936-1937

THE UNIVERSITY OF TORONTO PRESS

UNIVERSITY OF TORONTO

FACULTY OF MEDICINE

Toronto, June 30th, 1937.

To the Graduates in Medicine of the University of Toronto.

The Annual Report of the Dean of the Faculty of Medicine for the Session 1936-37 is, with good wishes and greetings, sent to you herewith.

W. E. Gallie, M.D.,
Dean.

REPORT OF THE DEAN OF THE FACULTY OF MEDICINE

W. E. Gallie, M.D., F.R.C.S.

The annual report of the Dean of the Faculty of Medicine is written each year in order that the President, the Board of Governors and the graduates may be kept aware of all the important activities of the Faculty during the previous twelve months. It contains, therefore, references to the more important enactments of the Faculty Council, an account of any changes that may be taking place in the laboratories and hospitals, any news items that might prove of general interest and the reports of the various academic departments.

The first meeting of the Faculty Council saw the installation of the new Dean, Doctor W. E. Gallie, the Professor of Surgery. He was introduced by the President, who requested for him the general support of the Council. At this same meeting, a resolution of warm appreciation of the services of the retiring Dean, Professor J. G. FitzGerald, was adopted. Since his retirement from the Deanship, Dr. FitzGerald has been on leave of absence from the University and has been making an extensive survey for the Rockefeller Foundation of the methods of teaching preventive medicine in the medical schools of the United States, Canada, the British Isles and Europe. Upon the completion of this work he will return to take up again his duties as Director of the School of Hygiene and the Connaught Laboratories.

The most important enactment of the Faculty Council has been the raising of the conditions for academic standing at the end of the first year. It has long been felt that students who are unsuited to the long and arduous training required by modern medicine should be dropped from the course at the earliest possible moment and given an opportunity to select, before it is too late, some other vocation in which they might be more likely to be successful. With this in mind the curriculum in the first year, which corresponds to a premedical year in other schools, was changed to consist of a first group composed of French or German, a second composed of Biology, Chemistry and Physics and a third composed of History of Science and Civilization. To obtain standing at the end of the year, the student must obtain at least fifty per cent. in each subject and an average of sixty per cent. in the group composed of Biology, Chemistry and Physics. As a result of the raising of the standards in the first year, it is hoped that the weak students will be detected at once and started in other directions.

As the selection of the students who are to be allowed to go into the second year and start the study of Physiology and Anatomy is a matter of great importance and as some members of the Faculty Council feel that perhaps a student's ability to pass an examination in premedical subjects should not be the sole guide in deciding whether he is likely to get through the medical course successfully, it has been decided to submit all freshmen, before the end of the first year, to the Aptitude Test which is used by the Association of American Medical Colleges. This consists of a written examination in which a very large number of questions are asked which are designed to discover whether the students have those qualities which would enable them to face a rigorous six-year course, to become good doctors afterwards and to occupy that place in the life of the country which a medical degree from this University suggests that they should occupy.

Another enactment of great importance was the appointment of a committee to study the curriculum and to report to the Faculty whatever changes might be considered beneficial. This committee has spent the past year considering the curriculum of the first, second and third years. Their report indicated that they believed that the time-table was too full and that matters might be improved by a general reduction by each of the departments of the number of hours prescribed in the calendar for laboratories and lectures. The Faculty adopted this report and during the summer the various departments will try to work out a reduction of the number of compulsory hours.

The discussion which attended the presentation of this report indicated that there was no unanimity in regard to it and that one department at least, namely, that of Anatomy, was strongly opposed to a reduction of the number of hours devoted to that subject, on the grounds that it would be impossible for the average student to acquire an adequate knowledge of human anatomy if there were a radical reduction of hours. This matter is now being considered by the department and a solution will probably be found.

Reference was made last year to certain experiments in teaching which were being tried in the department of Surgery, designed to make the course more practical. This department has been dissatisfied with the use hitherto made of the time at its disposal, particularly in the sixth year, and has been seeking ways of inducing the students to occupy less the position of onlookers and more that of participants in the daily work of the hospital. A decided improvement has been made by greatly increasing the routine duties of each student. Thus, he is now responsible for all the hospital records; he is required to assist at operations on his own patients; he must take part in the daily work in the outpatient department and he must attend all emergencies occurring at night. The result has been that the students have really become assistants to the interns and are taking advantage of the excellent clinical opportunities that are afforded them.

A similar improvement has been made in Obstetrics by completing all didactic instruction in the fourth and fifth years and leaving the whole of the time in the final year to practical work. This means that each student has greatly increased opportunity to work in the antenatal clinics, to see and assist at confinements and to follow the subsequent progress of mother and babe. This has been, perhaps, the most outstanding improvement in teaching that we have to report this year and nullifies the criticism we have had to accept for so long that our teaching of practical obstetrics was weak.

The plan of accepting volunteer students to serve in the summer months, which was adopted a year ago by the departments of Surgery and Obstetrics and Gynaecology, has proved very successful. It has two distinct advantages in that it gives those students who are able to attend hospital in the summer a wonderful opportunity for clinical work and it reduces the number of students in the regular classes during the rest of the year. At the end of the summer, the clinical examinations are held and if the student is successful he is given full credit for his work and is required to face no further examinations except the written final examination in the spring. During the period of ten weeks when, under normal circumstances, he would be taking the subject he elected to take in the summer, he is detailed to some special service such as neurosurgery, urology, the surgery of childhood or some branch of medicine or paediatrics if it can be arranged. The whole idea has proved very satisfactory and is popular with the students who have been able to take advantage of the opportunity.

In the reports of the various departments will be found reference to the many important researches which are being conducted. I must refer particularly, however, to several of these that are now approaching completion and which give promise of far-reaching clinical results.

Six years ago, Professor Best began to study the possibility of using the newly discovered extract of liver, "heparin", which was known to delay the clotting of blood, in the prevention of thrombosis. As this is a matter which interests surgeons as much as physiologists, Professor Best suggested that the Department of Surgery join the Department of Physiology in the study. For several years, therefore, Professor Best and his associates and Dr. Gordon Murray and others in the Department of Surgery have been working steadily towards an answer to the question as to whether the administration of heparin could be expected to prevent thrombosis and also the more serious complication, embolism of the pulmonary artery. The experiments on animals are now complete and the first papers have been published. They show that, as far as animals are concerned, thrombosis in damaged arteries and veins can be prevented by the local heparinization of the area by means of a solution of heparin introduced into the vein or artery through a fine needle. They also show that as a result of the continuous intravenous injection of a solution of heparin, the clotting-time of the general blood stream can be greatly lengthened and the tendency to thrombosis in damaged blood-vessels correspondingly reduced.

Before administering this extract to patients, years of research had to be carried out in the Connaught Laboratories to ensure the purity of the product and to eliminate all possibility of harmful reactions. This has been accomplished with complete success and the drug has now been administered to over one hundred patients without deleterious effect and with what seem to be promising results as far as thrombosis is concerned. A hundred patients are, of course, too few to allow one to draw sweeping conclusions but it will not be long before a thousand cases will be available for review and if these resemble the first hundred a most important step forward will have been made.

The funds for this long and expensive research have come from the University through the Connaught Laboratories and the Department of Physiology, from the Banting Foundation, and more recently, from generous contributions to the Department of Surgery made by Mr. J. S. McLean and Canada Packers, Limited.

On June 15th, what may prove to be an epoch-making paper was read before the Academy of Medicine in Toronto by Mr. Denny and Doctor Robson of the McIntyre Porcupine Mine and Dr. D. A. Irwin of the Department of Medical Research on Silicosis. This paper was really a preliminary report of the results of experiments on animals conducted at the mine and at the Banting Institute under the direction of Sir Frederick Banting, designed to discover ways of controlling this serious industrial disease. The chief results of these experiments were first, that it was established that the incidence of the disease bore a direct relationship to the amount of silica dissolved in the body fluids, and second, that any measures that reduced the amount of silica taken into solution in the body correspondingly reduced the appearance of the disease. This led to an intensive search for means of preventing the solution of the silica dust in the fluids of the air passages and resulted in the discovery that the simple expedient of throwing a small quantity of finely divided aluminum dust ito the air with the silica made the latter practically insoluble. How it does it is not yet known but it may have something to do with the known fact that the silicon atom carries a negative charge and the aluminum atom a positive charge of electricity. At any rate the experiments showed that whereas animals exposed to ordinary mine conditions such as obtain in stoping operations, developed silicosis, other animals exposed to similar silica-laden air, which, however, carried a small quantity of aluminum dust, did not.

This is the point at which the experiment now stands and the results have been considered so important that the whole of the resources of the Department of Medical Research have been placed at the disposal of the silicosis workers and experiments on a very large scale have been undertaken by Sir Frederick Banting, Dr. Franks and Dr. Irwin in conjunction with the workers at the mine.

The importance of a solution of the problem of silicosis in our mines cannot be overestimated. In spite of intensive study all over the world, no real progress has been made in the past ten years. And now as the result of a couple of bright ideas and the will to investigate and because of the presence here in the midst of the mining industry of a first class department of medical research, it would seem that the problem is almost solved. The workers deserve the best wishes of all for continued good luck in their study.

The work at the Connaught Laboratories calls for special mention this year because of important modified preparations of insulin which have recently been developed. About two years ago, Dr. H. C. Hagedorn and his associates of Copenhagen, Denmark, proposed the addition of protamine to preparations of insulin. In clinical studies they showed that such a modified preparation of insulin had the important advantage that its blood-sugar-lowering effect was more prolonged than that of the original insulin and that the frequency of administration could, therefore, be reduced. To this Danish discovery has been added that of Dr. D. A. Scott at the Connaught Laboratories where it has been shown that the addition of a small amount of zinc to preparations of protamine and insulin still further prolongs the effect of the hormone. Following intensive laboratory trials and co-operation with many hospitals and clinicians, a preparation of insulin modified by the addition of protamine and zinc has been made available under the name of "Protamine Zinc Insulin". The use of this new preparation is indicated in many cases of diabetes mellitus which can be only inadequately controlled with unmodified insulin.

In the report of the Department of Medicine will be found the modest statement that "the investigation on the therapeutic value and physiological action of adrenal cortical extract has been continued and extended this year by Dr. Cleghorn and Mr. Armstrong. It is encouraging to report that a number of cases of Addison's Disease have been successfully treated by a highly potent nontoxic extract prepared in the Connaught Laboratories under the direction of Dr. McHenry". This statement indicates successful progress in an important research which has been extended over years. If further clinical success attends the use of the extract a most important contribution to our defence against a hitherto incurable disease will have been made.

I am glad to be able to report an increasing tendency on the part of the various departments to co-operate with one another in research. Outstanding examples are seen in the "heparin" research conducted by the Departments of Physiology and Surgery, a study of the nature of nerve impulses and muscle contraction conducted by Drs. Solandt, Smith and Botterell of the Departments of Physiology, Anatomy and Surgery, and the investigation which is occupying the attention of Professor Marrian of the Department of Biochemistry and Dr. M. C. Watson of the Department of Gynaecology and Obstetrics on the female endocrines. Special attention is drawn to the increasing importance of the Department of Medical Research, under the direction of Sir Frederick Banting, in aiding all other departments, and particularly the clinical, in the research problems which present themselves from time to time. At the present moment research workers in this department are associated with workers from the Departments of Medicine, Surgery, Psychiatry and Paediatrics in problems which are primarily of clinical importance and the assistance which is being given to the advancement of these researches is inestimable.

Similar beneficial effects have resulted from the combination of departments in teaching and in general routine work. Examples are seen in the combination of physiology and surgery as represented by Drs. Solandt and Botterell in the teaching of neurophysiology, and of pathology, medicine and surgery in the neuropathological laboratory under Professor Linell, Dr. Hyland and Dr. K. G. McKenzie. Similar combinations of pathology, medicine and surgery and of physiology and medicine have been most helpful.

The re-organization of the staff of the Western Hospital which has been pending for a long time was completed a year ago at the time of the opening of the important additions to the hospital plant. The new arrangement has been in action now throughout one complete session and from the standpoint of the Faculty of Medicine has been most satisfactory. Teaching has been carried on in medicine, surgery, gynaecology and obstetrics and pathology throughout the year under the direction of Professors Detweiler, Duff, Wesley and Shanks respectively.

This year has been a sad one for the Faculty because of the death of our honoured colleagues, Professor Oskar Klotz, Professor F. W. Marlow, Dr. A. J. Kilgour, Dr. J. E. Bates and Dr. M. M. Crawford.

Professor Klotz died on November third, 1936, in his fifty-ninth year. He will be remembered by his students as a most distinguished pathologist, a splendid teacher and a remarkable organizer. Professor Marlow died on October second, after a long fight with serious illness. He was a fine surgeon and an excellent teacher and a man who occupied a prominent place not only in his profession but also in the life of the city. Dr. Kilgour died at the age of forty-four years with what seemed to be a promising career in psychiatry before him. Dr. Bates was a young pathologist of attractive personality and his sudden death cast a gloom over the department. Dr. M. M. Crawford, chief coroner of Toronto and lecturer in medical jurisprudence was known and beloved by all.

This year saw a change in the arrangements for the Balfour Lecture. Hitherto it has been delivered on Lister Day, April the fifth. As the limitation of the lecture to that date, however, made it impossible to have lecturers from the other side of the sea except on such rare occasions as a suitable lecturer might be visiting America at that time, the Faculty decided that from time to time the date might be changed so that our students might have the advantage of hearing distinguished surgeons from abroad. This year the lecture was delivered on October sixteenth by Sir James Walton, Surgeon to His Majesty the King, and his subject was, "The Surgical Treatment of Peptic Ulcer", a subject which has made him famous. Sir James was listened to by a huge audience which was delighted to welcome so distinguished a visitor from the old country. The plan of occasionally changing the date of the lecture has been approved by all.

The Faculty has heard with great satisfaction of the appointment of Professor William Boyd to the Chair of Pathology. This university is exceedingly fortunate in being able to secure so distinguished a pathologist and so great a teacher. He needs no introduction as every student who has graduated from any English-speaking medical school in the past ten years is familiar with his books. His coming to Toronto will probably mean the introduction here of the method of clinical pathological teaching which has become his chief interest. The Faculty bids him welcome.

The success of the short postgraduate courses which have recently been held in the autumn has been so great that they will be continued. Last year, courses were given in physiotherapy and abdominal surgery. This year, courses of one week each will be given in manipulative therapy, cardiovascular disease, and fractures. Limited numbers of students are admitted to these courses and their whole time is occupied throughout the week. Students have expressed themselves as delighted with the plan of an intensive review of some special branch of work and are asking for continuation of the courses. The Faculty finds this contact with the graduates most enjoyable.

This year the Assistant Dean and Secretary, Dr. E. S. Ryerson, is the President of the Association of American Medical Colleges and he will preside at the coming meeting in California. Professor C. H. Best spent the month of April as guest-lecturer at the Universities of California, Southern California and Leland Stanford. During the week of November first, the Dean occupied the position of Honorary Surgeon-in-Chief at the Hospital for Ruptured and Crippled in New York, where he had been house-surgeon thirty years before.

The Medical Society, which controls all student affairs, has had a very successful season and reports satisfactory results from the Journal, the Medical-at-Home, and Daffydil. A substantial surplus is again available to be turned over by the retiring executive to the bursary fund.

During the past session, the following Bursaries were awarded: 10 in the Sixth Year, 11 in the Fifth Year, 3 in the Fourth Year, and 2 in the Third Year.

The following appointments and promotions have also been made:

William Boyd—*Professor of Pathology and Bacteriology.*
G. L. Duff—*Assistant Professor of Pathology.*
W. R. Franks—*Associate Professor in the Banting and Best Department of Medical Research.*
K. G. Gray—*Lecturer in Medical Jurisprudence.*
G. E. Hall—*Associate Professor in the Banting and Best Department of Medical Research.*
A. W. Ham—*Associate Professor in Anatomy.*
B. Hannah—*Associate in Medicine and Clinical Medicine.*
J. Hepburn—*Associate in Medicine and Clinical Medicine.*
K. G. McKenzie—*Assistant Professor in Surgery and Clinical Surgery.*
Bruno Mendel—*Assistant Professor in the Banting and Best Department of Medical Research.*
T. Owen—*Associate in Medicine and Clinical Medicine.*
T. A. Robinson—*Associate in Surgery and Clinical Surgery.*
W. L. Robinson—*Lecturer in Medical Jurisprudence.*
J. W. Ross—*Associate in Surgery and Clinical Surgery.*
C. G. Smith—*Lecturer in Physiology.*
Mary I. Tom—*Lecturer in Neuropathology.*

MEDALS, PRIZES, SCHOLARSHIPS AND FELLOWSHIPS

Awarded by the Senate of the University Faculty of Medicine

SIXTH YEAR

The Faculty Gold Medal	K. J. R. Wightman
The Faculty Silver Medal	W. L. M. King
The Faculty Silver Medal	A. W. Bagnall, B.A.
The Ellen Mickle Fellowship	K. J. R. Wightman
The Chappell Prize in Clinical Surgery	H. Hayward
The William John Hendry Memorial Scholarship in Obstetrics and Gynaecology	J. D. Markham

The Ontario Medical Association Prize in Preventive Medicine	D. G. H. MacDonald, B.A.
The Canadian Medical Institute Prize	H. C. Balmer

UNDERGRADUATE

The David Dunlap Scholarships:	
(*a*) Fifth Year	A. Auerback
(*b*) Third Year	J. H. Tritt
The Ronald S. Saddington Medal in Pathology	D. H. Copp, B.A.
The Toronto Women's League of the United Synagogue	G. A. Lane
The Baptie Scholarship	J. G. Mickler

GRADUATE

The Reeve Prize	G. E. Hall, M.S.A., M.A., M.D., Ph.D.
The Starr Gold Medal	W. L. Donohue, M.A., M.D.
The Alexander McPhedran Research Fellowship in Clinical Medicine	R. C. Dickson, M.D.
The Perry Goldsmith Prize in Oto-Laryngology	P. E. Ireland, M.D.
The Faulkner Medal in Psychiatry	G. E. Hobbs, B.A., M.D., D.Psych.
The George Armstrong Peters Prize	C. H. Watson, M.B.
The J. J. Mackenzie Fellowship in Pathology and Bacteriology	H. C. Hair, M.D.

REGISTRATION OF STUDENTS IN THE FACULTY OF MEDICINE

Session 1937-1938

DEPARTMENT OF ANATOMY

(*Under the direction of Professor J. C. B. Grant*)

There were working in the Department of Anatomy during the session 1936-1937:

Medical Students:		
Second Year	139	
Third Year—regular	124	
Biological and Medical Sciences:		
Third Year—regular	20	(with second year medicine)
Fourth Year—regular	24	(with third year medicine)
Third Year Psychology	9	" " " "
Third Year General Course	1	
Dental Students:		
Second Year	42	
Post Graduate Students:		
Histology	1	(M.A. Minor)
Histology	1	(Ph.D. Minor)

Gross Anatomy	2	(Ph.D. Minor)
Gross Anatomy	1	(Ph.D.—Special problem)
Gross Anatomy	8	(Occasionals)
Total	372	

Of these a number elected anatomical subjects as options as follows:

III Year—Cytology	3	(Dr. Piersol)
III Year—Special Histology	30	(Dr. Ham)
IV Year B. &. M.—Special Histology	6	
Graduate Course in Psychiatry—Neurology	2	(Dr. Cates)

Courses in Elementary Anatomy were given, as follows:

Graduate Nurses from School of Nursing	19	(Dr. George)
First Year in Occupational Therapy	27	
First Year in Physiotherapy	21	
Second Year in Physiotherapy	17	

Physical Education:

Margaret Eaton School Juniors	20	(Miss McMurrich)
Margaret Eaton School Seniors	15	
II Year Arts	2	
III Year Arts	6	

A course of ten lectures was given by Dr. Cates to twenty students of the College of Optometry.

Owing to the foresight of my predecessor, Professor McMurrich, in designing the Anatomy Building, it has been possible to make certain structural alterations which have resulted in improving very considerably the instruction offered in the anatomy of the nervous system. Instead of meeting as previously in four scattered rooms, the students of this class now meet in two large newly-equipped rooms where better instruction can be given under closer supervision. The programme of the work of this class is arranged in collaboration with the Department of Physiology. The histology of the central nervous system, which formerly was taught during the second year as part of the work of the histology class is now taught in the third year as part of the anatomy of the central nervous system.

The American Association of Anatomists held its fifty-third annual meeting in the University of Toronto during Easter Thursday, Friday and Saturday. This was the first time the Association had met in this country. It was generally necessary to hold from three to six simultaneous meetings, each with a lantern, operator and attendants in order to cover the lengthy programme of 150 papers and 58 demonstrations and a great deal of preparation was required of every member of the staff to make the meeting successful. The registered attendance was 303, of whom 281 were from out of town. At the close of the meeting the following resolution was unanimously adopted: "For three days the American Association of Anatomists has enjoyed the welcome of His Majesty's Dominion of Canada and the generously expressed hospitality of the University of Toronto.

Assured by the gracious message from Lord Tweedsmuir, the Governor-General; warmed by the felicitous phrases of Canon Cody, the President of the University; cheered by the genial presence of Professor McMurrich; beset about and about by myriad practical expressions of efficient preparation and organization on the part of Professor Grant, his colleagues and his staff, for our ease, our comfort and the interchange of our scientific thought, we desire to record our appreciation and express our thanks to all those named and implied in this resolution.

We would have them know that human kindliness, hospitality and fellowship, no matter how certainly anticipated or relied upon, are experiences ever-shiningly and exhilaratingly new. In joy of this realization we bear our witness and beg our hosts to accept this testimony." (The resolution was presented by Professor T. Wingate Todd.)

THE BANTING AND BEST DEPARTMENT OF MEDICAL RESEARCH

(*Under the direction of Professor F. G. Banting*)

Dr. D. A. Irwin and his co-workers have continued the study of silicosis both as a departmental problem and in co-operation with the Silicosis Research Committee of the Ontario Mining Association, and with the McIntyre-Porcupine

Mines. Temporary quarters have been built on the roof of the Banting Institute to enable the dusting of experimental animals under conditions similar to those encountered industrially. Special attention is being paid to possible preventive measures.

Miss H. Williams is investigating the extent to which tissues are capable of leaching various silicates.

Mr. W. M. Gray has furthered the X-ray diffraction method for the quantitative estimation of quartz in dust and has analyzed many samples in the past year.

Mr. H. L. Collins is engaged in the study of the effect of various compounds on the solubility of silica.

Dr. L. M. Gray has made an experimental study of fat embolism.

Dr. D. D. Bonnycastle, in co-operation with Dr. A. W. Farmer of the Department of Surgery and Dr. D. A. Irwin, has investigated the toxic substances that have been demonstrated in the urine of patients suffering from burns.

With the co-operation of the Department of Radiology, Dr. W. R. Franks and Miss M. M. Shaw have shown a synergism between the toxic action of glyceric aldehyde and X-ray on tumor.

Dr. W. R. Franks, assisted by Mr. A. Duncan, has successfully worked out the photoelectric analysis of certain dusts. They also found that the efficiency of the Konimeter parallels that of the dust retention of the lung.

Dr. Franks and Mr. H. J. Creech synthesized a chemoantigen for dibenzanthracene and protein and studied its serological properties. The influence of this antigen in calling forth an immunity to the carcinogenic activity of such substances is being studied.

Dr. Franks and Mr. L. D. Proctor have developed a clinical method for the measurement of blood glyoxalase. With the co-operation of the Departments of Medicine and Psychiatry and with the technical assistance of Miss G. Mulholland, a clinical survey of blood glyoxalase in disease has been conducted.

Dr. Franks and Miss Shaw are studying the influence of focal infection, and control of deposition of intercellular substances by avitaminosis C, in the formation of the silicotic granuloma.

In tissue culture Dr. E. M. Hearne has studied the action of various carcinogenic hydrocarbons with special reference to cell division.

Dr. G. E. Hall is continuing study on the general problem of cardiovascular disease, in collaboration with different members of the group.

Dr. Hall, Mr. G. W. Manning and Dr. Banting have continued the investigation of the effects of chronic stimulation of the vagus nerves in dogs, in relation to the general cardiovascular problem under investigation in the Physiological Division.

Dr. Hall and Mr. Manning have studied the physiological and pharmacological effects of various vagomimetic drugs on the cardiovascular and upon the vagus enzyme systems. With Miss Lang, they have extended this study to the effects of autonomic stimulation upon the secretions of the pancreas, thyroid, liver and pituitary gland.

Mr. Manning and Mr. L. Brock have devised a new apparatus for continuous intravenous injections in the unanaesthetized and unrestrained animal. They have likewise devised a sequence timer slip-ring-contact unit for continuous nerve stimulation in the unrestrained animal.

Dr. Hall and Mr. Manning have continued the study of chronic and semi-chronic injections of acetylcholine in the study of myocardial and coronary artery disease. The effects of atropine and acetylcholine injections for long periods of time have also been investigated.

Mr. Maning has investigated the coronary artery distribution in the hearts of many species of animals and has supplemented this study by preparing injected and cleared specimens of these hearts.

Dr. Lucas and Dr. Hall have studied the choline esterase activity of normal and pathological human sera. In attempting to correlate this enzyme with the vagotonic state, Dr. Lucas and Dr. Hall have studied the choline esterase, and other esterases, activity of the area from many species of animals towards various subtrates. Further work on this problem is being carried out by Dr. Hall, Miss Lang and Dr. Lucas.

Mr. Manning and Dr. Hall have studied the electrocardiographic and pathological changes resulting from experimenta- ligation of various branches of the coronary arteries in dogs. The physiological extent of such lesions has been confirmed by perfusion and clearing experiments.

Dr. Hall, Dr. Banting and Dr. Cleghorn (of the Department of Medicine) are investigating the production of cardiac and gastrointestinal lesions in adrenalectomized dogs.

Dr. Cleghorn (Medicine) and Dr. Hall are studying the electrocardiographic changes in experimental adrenal insufficiency following various therapeutic measures. Dr. Hall and Dr. Manning are studying the effects upon the heart and its responsiveness to vagus stimulation and para-sympathetic drugs in the stellate ganglionectomized animal.

Dr. Hall is studying experimental nephritis, produced by the injection of heterogenous sera from ducks which had received many injections of kidney tissue extracts.

Dr. H. F. Richardson, Dr. B. C. Coles and Dr. Hall have studied the effects of intravenously injected air in relation to a general departmental problem on embolism. These workers have also studied the effects of injected solutions of lysol, soaps, etc., as are commonly used in the production of abortions.

Dr. Hall is studying the effects of intravenously injected oxygen, nitrogen, carbon dioxide and air upon the gaseous exchange in the lung with the therapeutic use of intravenous oxygen in mind.

Mr. J. E. Goodwin has constructed amplifying and recording units, both of the permanent and portable types used in these investigations.

In conjunction with Mr. D. P. C. Lloyd, Mr. Goodwin has constructed amplifiers, time sequences, etc., to complete the cathode-ray oscillograph unit which they have assembled. With this unit Mr. Lloyd has continued studies begun at Oxford on the physiology of abdominal ganglia as revealed by analysis of their action potentials following electrical stimulation. The fibre pathways through the inferior mesenteric ganglia have been determined.

Mr. Lloyd is studying the action potentials of localized areas in brain and cord by means of the cathode-ray oscillograph and stereotoxic electrode.

Mr. Lloyd and Dr. Hall are studying action potentials of different areas in brain, the electroencephalogram and the general cardiovascular condition in animals with experimentally produced convulsions and brain lesions.

With Dr. Alan Brown and Dr. Hawk, of the Hospital for Sick Children, Mr. Lloyd, Mr. Goodwin and Dr. Hall are studying the electroencephalograms of epileptic and behaviour problem cases from that hospital.

With Professor Duncan Graham and Dr. Hyland, of the Department of Medicine, Mr. Lloyd, Mr. Goodwin and Dr. Hall are to study the electro encephalograms of hospital patients suffering from migraine, epileptiform convulsions and many other neurological conditions. This group, in conjunction with Dr. McKenzie and Dr. Botterell, will extend their studies to brain tumour cases—correlating the preoperative electroencephalogram with records taken from the exposed brain during operation.

Mr. H. Davidson, Dr. Banting and Dr. Hall are studying (with the co-operation of Dr. Duff, Degartment of Botany) the mechanism which protects certain plants from the toxic effects of their own alkaloids.

Dr. C. C. Lucas, head of the Biochemistry Division of the Department, has been on leave of absence since July 1st, 1936. He is working under Professor Harrington, University College, London, England.

Mr. L. B. Macpherson is studying the source of aminoethyl phosphoric ester and the phosphatase activity in tumor tissue.

Mr. J. K. Watson has synthesized and identified a series of new ortho silicic acid esters of the higher alcohols.

Mr. F. H. Lawford made a chemical investigation of the acid-fast fraction of tubercle bacilli. He also prepared a number of ferricyanide compounds for Dr. Bruno Mendel.

Miss H. Ball has investigated the fat-splitting enzyme of acid-fast bacilli.

In September, 1936, Dr. Bruno Mendel was appointed an Assistant Professor to the Department without salary. Dr. Mendel brought his entire laboratory equipment and a fund which pays for his two assistants and all other expenses in connection with his work. He is studying immunity to experimental tumor.

DEPARTMENT OF BIOCHEMISTRY

(*Under the direction of Professor H. Wasteneys*)

Three of the junior members of the staff left the Department at the end of the year 1935-36. Dr. V. Ignatieff received a more senior appointment on the staff of the University of Alberta and was replaced by Mr. W. H. Fishman. Dr. Saul Cohen was awarded an 1851 Exhibition Research Scholarship and has spent the winter working in the laboratories of Professor Ruzicka in Zurich and of Professor Harrington in the University College Hospital Medical School in London. He was replaced by Mr. A. D. Odell. Mrs. V. Ignatieff was replaced by Miss Edith Batho. Mr. Desmond Beall returned at the expiration of his appointment on the staff of the National Institute for Medical Research, London, early in the spring and has since been engaged in research under a grant from the Banting and Best Foundation. Mr. Anthony Brown has spent the winter in the laboratory of Dr. Wigglesworth at the London School of Tropical Medicine. Dr. Lionel Farber, who has been engaged for the past two years on enzyme studies with Professor Wynne, left during the winter to occupy the position of Research Instructor at the University of Arkansas under Professor Barnett Sure. A former member of the staff, Dr. Bradley Pett, returned from abroad in the fall after holding an 1851 Exhibition Research Scholarship for two years and was appointed as a lecturer on the staff of the University of Alberta.

The total number of students registered in the department during the session 1936-37 was 301. This number was made up of 121 medical students, 45 students in the B. &. M. course, 10 students in Chemistry, 10 in the P. & B. course, 2 from the Department of Biology, 30 from Household Economics, 16 from Household Science, 1 in the General Course, 36 from Dentistry, 3 occasional students and 27 graduates. Of the graduate students 18 were candidates for the Ph.D. degree, 1 for the M.A., 1 for B.Sc.Dent., and 6 were registered as graduate students on probation. Nine students were taking biochemistry as a minor for degrees in other departments, and 9 students have taken work as a major or a minor in Zymology.

The new course in Comparative and General Biochemistry devised to suit the requirements of students in the Biology and

Biological and Medical Sciences courses was conducted successfully during the session by Professor Marrian with biology students only: in the coming session it will be attended also by students of the Third Year of the new B. & M. course. This will result in considerable saving of hours in the curriculum to the B. & M. students. It might be open to the criticism that it lays too much stress on comparative biochemistry to suit the needs of students destined for medicine, were it not to be followed by the advanced course in medical biochemistry and nutrition in the following year.

The new arrangement of the course in biochemistry recommended this spring by the Hunter Committee of the Faculty will be in operation next session. Since this involves the transference of a part of the present Third Year work to the Second Year of the Medical course, there will be considerable overlapping and the scheme cannot for purely mechanical reasons be carried out in final form this year. The staff in biochemistry welcomes the recommendation of the committee and considers that the more perfect correlation between the course in biochemistry and the courses in organic chemistry and physiology which will result is a very great improvement on the present sequence of courses.

The department has been requested to increase to 53 the number of lectures given to students of the Faculty of Dentistry. This involves increased work for our staff but we are glad to co-operate to increase the effectiveness of the dental curriculum.

The staff of the department have, as usual, been busily employed in research throughout the session and during the summer vacation. These researches have been described in a separate report to the President.

Professor Marrian's researches in the chemistry of the female sex hormones have been recognized abroad by requests to contribute reviews to the Annual Review of Biochemistry and to the Ergebnisse der Vitamin and Hormon-forschung and to participate in a Symposium on the Endocrine Glands to be held during June and July at Cold Spring Harbour in the United States.

DEPARTMENT OF HISTORY OF MEDICINE

(*Under the direction of Professor J. H. Elliott*)

The course of lectures laid down in the curriculun was given. The attendance at lectures has been most gratifying.

The collection of lantern slides used to illustrate these lectures is growing from year to year, and form a nucleus of a collection which will prove of value for future years.

I attended the Annual Meeting of the American Association of History of Medicine at Atlantic City on May 3rd, 1937, took part in the discussions and was honoured by election to the Council of the Association.

There have been several calls during the year for lectures outside the University. In addition to addresses at Montreal and Ann Arbor, I spoke before the Peterborough Medical Society on "Spain and its Place in Medical History", and in London at the Annual Meeting of the London Health Association, on the subject "The Historical Aspect of the Development of the Campaign against Tuberculosis". The National Tuberculosis Association of the United States annual meeting in Milwaukee, week of May 31st, devoted a full session to the dispensary control of tuberculosis to honour the 50th anniversary of Sir Robert Philip's founding of the Edinburgh dispensary. I was honoured by an invitation to open a symposium with an address "The Historical Aspect of the Dispensary Control of Tuberculosis".

Last year I reported that an historical exhibit of landmarks in the history of tuberculosis was prepared for the Mountain Sanatorium. This is to be exhibited at the June meeting of the Canadian Tuberculosis Association in Ottawa.

DEPARTMENT OF HYGIENE AND PREVENTIVE MEDICINE

(*Under the direction of Professor J. G. FitzGerald*)

The enrolment of graduate students in the course leading to the Diploma in Public Health for the session 1936-37 numbered seventeen. The following provinces were represented: Nova Scotia, New Brunswick, Quebec, Manitoba, British Columbia, Ontario. The registration included one candidate from Jamaica, Dr. S. E. L. Ferreira, Medical Officer, Yaws Commission. Fifteen students, of whom five were from the Province of Quebec, were on fellowship; ten Rockefeller Foundation, and five Connaught Laboratories.

Since the opening of the School of Hygiene in 1927, one hundred and fourteen students have completed their studies for the Diploma in Public Health. A total of one hundred and sixty-four students have been enrolled since the course was first offered by the Faculty of Medicine in 1911.

In the sub-department of Chemistry in relation to Hygiene, Dr. Moloney and Mr. Orr have continued their study of certain phases of the chemistry of antigens. In this regard, diphtheria toxoid has received special attention. Their research has been encouraging and may be expected to result in improvements of this antigen of practical application. Along with Dr. E. M. Taylor, Dr. Moloney has completed the study of Schick toxins and incorporated in a publication suggested new standards for the test.

A more comprehensive list of the researches pursued by members of the teaching staff will be presented in greater detail in the report of the Director of the Connaught Laboratories.

Dr. M. H. Brown is continuing his studies in collaboration with Dr. Caulfeild and Dr. Waters upon the passive transfer of sensitivity of ragweed antibodies. The classification of the Salmonella strains occurring in Canada is being carried out by Dr. Brown and Miss Anderson. Dr. F. H. Fraser and Dr. H. C. Plummer have continued their work on the classification, virulence, and other properties of haemolytic streptococci. Dr. J. S. Kitching has completed a study upon the stability of staphylococcus toxoid under varying conditions. Dr. R. Hare has isolated strains of influenza virus from the recent epidemic in Toronto. Dr. D. T. Fraser, in collaboration with Dr. A. E. Allin and Dr. Beverley Hannah, has shown that skin sensitivity to diphtheria protein may be rapidly developed during an attack of diphtheria.

The method of instruction in preventive medicine to students of the fifth year in medicine has been changed. The large class has been divided into seven tutorial groups and formal didactic lectures have, for the most part, been discontinued. By allotting topics to students it has been possible to sustain their interest more effectively and to stimulate individual effort. The experience gained during the first year of tutorial teaching has been great and the experiment successful. Lecture and laboratory courses were given to students of the School of Nursing and students of the Faculty of Engineering, and lecture courses to students of the Faculty of Household Science and the Faculty of Arts.

As in previous years the Department of Health, Ontario, and the Department of Public Health, Toronto, have given generous assistance to this department in the teaching of fifth year medical students during the field courses.

The enrolment for the session has been as follows:

Graduate	8
Faculty of Medicine, Fifth Year	112
Faculty of Household Science, Third and Fourth Years	18
Faculty of Arts, Third Year	29
School of Nursing	51

DEPARTMENT OF MEDICINE

(*Under the direction of Professor Duncan Graham*)

During the past year no essential changes have been made in the general plan of undergraduate instruction in this department but the facilities for hospital instruction and the organization for teaching have been greatly improved in the Western Hospital. The medical service of this hospital now is organized and equipped along the same lines as the medical service of the Toronto General Hospital. The Western Hospital has made it possible for the physician-in-chief to devote half his time to hospital work, teaching and investigation. In addition, provision has been made for one whole-time assistant and one resident physician. Since 1919 practical experience in the medical out-patient department has been an important feature of the undergraduate instruction in medicine for students of the final year. The recent addition of a number of individual examining rooms in the medical out-patient department of the Toronto General Hospital, each equipped for the office examination of patients, has made possible a further improvement in this part of the instruction in medicine.

Last July, Dr. H. K. Detweiler, a member of the medical service of the Toronto General Hospital, took over his new duties as physician-in-chief to the Toronto Western Hospital. In view of this new appointment he was promoted from the rank of Associate to Assistant Professor in the Department of Medicine.

Two former members of the interne staff of the Toronto General Hospital, Dr. Ian Macdonald and Dr. Hurst Brown, have joined the staff of the department as junior demonstrators in medicine. Dr. Macdonald, who is a graduate of Dalhousie University, has been appointed to the attending staff of the Toronto General Hospital. Dr. Hurst Brown, who is a Rhodes' scholar and a graduate in medicine from Oxford, has received an appointment on the medical service of the Toronto Western Hospital. A third new addition to the staff is Dr. F. C. Hamilton, a graduate of the University of Toronto, who has taken post-graduate training in London, Vienna and Boston. He has been appointed a junior demonstrator in medicine and has received an appointment on the medical service of the Toronto Western Hospital.

The present holder of the Alexander McPhedran Research Fellowship in Clinical Medicine is Dr. R. C. Dickson. During the past year, Dr. R. B. Kerr has been a Fellow in Medicine and resident physician of the Toronto General Hospital.

In recognition of his work on arthritis, Dr. A. A. Fletcher was elected the first president of the newly formed Canadian Rheumatic Disease Association.

Satisfactory progress has been made in many different problems of clinical research. During the past few years special attention has been given to the investigation of patients suffering from acute occlusion of the larger arteries. A special study has been made by Dr. Rykert and the head of the department on the time of onset, location, character, distribution and possible causes of the pain present in this condition, on the factors influencing prognosis and on the results of different methods of treatment. In reports of this investigation, attention is called to the presence and clinical significance of two types of pain in cases of acute embolic occlusion, to the frequency of spontaneous recovery of the local circulation following arterial occlusion affecting the upper extremity, and to the importance of the associated primary disease as a determining factor in prognosis and treatment. The outcome in respect to survival of the extremity is considered in relation to medical and surgical therapy.

An attempt has been made to find a satisfactory method for testing pulmonary efficiency in patients suffering from different types of emphysema. Several different methods have been tried but none has proved of great value. This work was carried out by Dr. Doidge, a Research Fellow in Medicine, working in collaboration with Dr. Warner. A new type of mechanical support for the relief of dyspnoea in emphysema has been evolved by Dr. Warner.

All cases of pulmonary abscess admitted to hospital in the past ten years have been reviewed by Dr. Warner with the object of determining the value of various forms of treatment. This review has shown that the results from present methods of treatment for lung abscess are unsatisfactory and indicates the need for practising all possible measures for its prevention.

In an effort to make the diagnosis of subphrenic abscess at an earlier stage, Dr. Doidge has made a careful review of the clinical findings in all cases of subphrenic abscess admitted to hospital in the past ten years.

The effects of various sulphites on the proteins have been studied by Dr. Campbell and Miss Hanna and this has resulted in the development of new methods for the easy separation of albumin, globulins and fibrinogen of blood plasma. These methods are now being applied in the investigation of patients suffering from nephritis, amyloid disease and other clinical conditions. A report of this work is in press.

The investigation on the therapeutic value and the physiological action of adrenal cortical extract has been continued and extended this year by Dr. Cleghorn and Mr. Armstrong. It is encouraging to report that a number of cases of Addison's disease have been successfully treated by a highly potent, nontoxic extract prepared in the Connaught Laboratories under the direction of Dr. McHenry. A joint report on the properties and use of this extract, from the two departments, is in press. The generous co-operation of the Connaught Laboratories has made this work possible.

Drs. Cleaver and Maltby will publish shortly a valuable report on the results in cases of gastric ulcer receiving medical treatment over a period of five years or longer.

Dr. R. C. Dickson is investigating the effect on the glucose tolerance curve of diseases of the liver and of the extra-biliary tract. He is studying also the nature of functional disturbances of the biliary tract.

Three years ago Dr. Hepburn published a report on the early results following total ablation of the thyroid in cases of angina of rest and of congestive heart failure. A follow-up of these cases has shown that the late results from this method of treatment are satisfactory in angina of rest but not in congestive heart failure.

Six years ago a patient suffering from ventricular tachycardia accompanied by shock and vomiting which prevented the oral administration of quinidine sulphate was given this drug intravenously with very satisfactory results. Since then nine other cases of ventricular tachycardia have been treated in this manner. Six of the nine patients are alive for periods up to four years after the first intravenous injection was given. Before this treatment was initiated only one case of a series of seven lived longer than fifteen days after the onset of the attack. A report on the use of quinidine sulphate intravenously in ventricular tachycardia was presented by Dr. Hepburn and Dr. Rykert at a recent meeting of the American Heart Association.

Dr. Hyland, in association with Dr. Botterell of the Department of Surgery, has made an analysis of the clinical findings in thirty cases of frontal lobe tumor. Evidence of the possible functions of the frontal lobe based on the clinical findings in this series of cases and on experimental findings in higher animals has been studied. A report will be published shortly.

Dr. Warner and Dr. Dauphinee have published a report on thrombosis of the coronary sinus in a case of thrombophlebitis migrans. The report is of special interest in that it is the first case of thrombophlebitis migrans in which the clinical diagnosis of thrombosis of the coronary sinus was confirmed at autopsy.

Dr. Trevor Owen is making a clinical study on patients suffering from migraine. He has presented a preliminary report on the diagnosis and treatment of this distressing condition.

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

(Under the direction of Professor W. A. Scott)

Several changes have been made in the method of teaching, designed primarily toward increasing the practical work of the students. The didactic lectures on normal obstetrics have been moved to the Fourth Year and all didactic work is now completed by the end of the Fifth Year. The student now approaches his practical training in the Sixth Year, having completed his didactic work. A further change has been made whereby practical teaching commences in the Fifth Year. During that year, each student lives in either the Western or St. Michael's Hospital for two weeks, during which time, he has no other duties and actively participates in the obstetrical work of those hospitals.

During the summer months, a limited number of selected students who have completed their Fifth Year are given their practical work in obstetrics in a manner similar to that carried out by the Department of Surgery. This innovation would appear to be a very successful one and in addition to providing exceptional facilities for these selected students, it reduces the number of students taking the regular course during the academic year.

The method of examination has undergone some change, the Fifth Year being only a written examination which is a thorough test of the student's theoretic knowledge; in the Sixth Year, at the end of his practical work, each student is given an oral examination by the head of the Department and one of his assistants, and at the end of the year, has a written examination, designed to test his ability to apply the knowledge gained in the Fifth and Sixth Years, to practical problems.

In order to make more extensive study of our obstetrical material, responsibility for the compilation of data on various phases of work at the Burnside has been made the individual responsibility of a certain number of members of the staff. Dr.

Henderson is responsible for heart disease in pregnancy, Dr. Mann for occiput posterior cases, Dr. Goodwin for stillbirths and neonatal deaths, and Dr. Low for Caesarean section.

The clinic for the study of all cases of suspected disproportion has been instituted and is under the supervisionn of Dr. Scott and Dr. Cosbie. Dr. Cosbie and Dr. Mann are carrying on the work, in the Radiological Department, of cancer of the genital tract in collaboration with the Institute of Radium Therapy. Dr. Cosbie and Dr. Richards have published one paper and a second is being prepared by Dr. Cosbie and Dr. Henderson.

Dr. M. C. Watson, who has been given a hospital appointment in the out-patient department, is continuing his study of the female endocrines in conjunction with Dr. Marrian. He has published two papers on clinical aspects of his work and a third is in preparation.

Dr. Henderson has continued to carry on the work for the Obstetrical Department of the combined Cardiac-Obstetrical clinic which is conducted in conjunction with the Department of Medicine. He read a paper on this subject at the Canadian Medical Association last June.

Dr. Goodwin has completed his study of the anthropological factors in relationship to labour and this is now ready for publication.

It will be seen in the above report that a continued effort is being made to correlate the work of the Department of Obstetrics and Gynaecology with that of the other departments of the School. The staff meetings have been utilized to further this effort and during the year various departments have sent members of their staff to discuss with us problems having a common basis.

DEPARTMENT OF OPHTHALMOLOGY

(*Under the direction of Professor W. H. Lowry*)

We have had one hundred and thirty-five specimens sent to us for examination and report, which is a considerable increase over last year. Among these there have been many interesting specimens which we have added to our museum.

Dr. Johnston is continuing his investigation of the fluid obtained from the numerous cases of detached retina that we are seeing.

Dr. Morgan has perfected a method of transplanting corneal tissue in rabbits and we are now looking for a suitable patient who is willing to allow him to transplant clear cornea to replace a scarred cornea.

The members of the staff have worked harmoniously together, which has made the work very pleasant throughout the year.

DEPARTMENT OF OTO-LARYNGOLOGY

(*Under the direction of Professor P. G. Goldsmith*)

There is nothing special to report regarding the Department of Oto-Laryngology. The teaching has been directed to fit the student to deal with the common ailments of general practice. The students must become familiar with the special instruments ordinarily used in examining the ears, nose and throat. Special stress is laid upon this in the final examination. Every effort is made to keep before the students the close relationship existing between general medicine and oto-laryngology.

In my last report, I referred to the difficulties in dealing with such a large number of students, and considered a reduction in number of the teaching members to correspond with the diminished time of instruction. Now that the students come with a better knowledge of the nose, throat and ear, there is no necessity for further anatomical lectures in the fifth year. This will permit more time being given to the methods of examination.

It has long been my view that teaching oto-laryngology should be extended to another general hospital. The only clinical teaching now given is at the General Hospital where suitable patients are always available, and at the Sick Children's Hospital for a small number once a week. There is no necessity of any special teaching in oto-laryngology that cannot be obtained in a general hospital. Too much attention at a children's special hospital does not give sufficient clinical experience in the average general practice. In order to advance the time when another hospital with teachers' appointments should be available, Dr. A. H. Veitch, Assistant Surgeon of the Oto-Laryngology Department of St. Michael's Hospital, has been added to the University staff. I consider this is very desirable and strengthens the Departmental staff. I have every hope that oto-laryngology will be taught in St. Michael's Hospital after the next session, now that there are two members of the staff of this hospital also on the University Faculty.

DEPARTMENT OF PAEDIATRICS

(*Under the direction of Professor Alan Brown*)

In addition to the routine teaching of medical students, internes and nurses carried out by this department, research on the prevention and cure of diseases of children has been energetically prosecuted.

A study was instituted about 1929 on the cause and means which could be taken for the prevention of acute summer diarrhoea which is so prevalent in Toronto during the months of August and September. Largely as a result of these studies, the infant mortality rate on the infant ward of the Hospital for Sick Children was reduced from 39 per cent. in September, 1931, to 32 per cent. in September, 1933, 16 per cent. in 1935, and to the lowest figure of all, 14 per cent. in September, 1936. This reduction in mortality is not only due to better treatment of the disease but to increased knowledge as to how to prevent the disease. A more efficient method for the treatment of tetanus has been evolved in the department during the past few years. From 1924 to 1929 there were 15 cases admitted to the Hospital for Sick Children with only two recoveries. During the past seven years there have been 24 cases admitted, with no less than 13 recoveries, or over 50 per cent., while two of the last three cases admitted have recovered. In other words, if a child develops tetanus to-day his chance of being saved is many times that of a few years ago. Similar results are being obtained with influenzal meningitis. From 1919 to 1929 there were 70 cases admitted to the hospital, with only one recovery, while from 1930 to 1936 there have been 36 cases with 10 recoveries. As shown by the records of the hospital, the number of cases of rickets, a disease which can be prevented, has been reduced from 121 cases in 1920 to only 4 cases last year.

On the evening of January 23rd, the opening exercises of the Department of Psychological Medicine were held at the Hospital for Sick Children. This is a clinic for the mental care and adjustment of problems during childhood. The immediate medical staff is drawn from the full-time staff of the Department of Paediatrics. As is well known, many of the mental defects of adult life have their beginning during childhood. In fact it might be said that most mental defects in adult life have their beginning in childhood. To be of the greatest value, a considerable portion of the work of this clinic must be in the treatment of what would be ordinarily considered minor problems of mental adjustment which if corrected early will result in the development of normal, happy useful citizens but if allowed to go on in many cases would end with the individual in the juvenile court or even in the penitentiary. It is now realized that the mental care of the child is just as important as the physical care. We feel proud that this clinic which has just been established is the first of its kind in Canada, and the fourth throughout the world.

To show the nature of the research problems which have been undertaken during the past year, a list of the publications from the Department shows that the efforts of the workers are being devoted to many of the urgent problems which concern us in the care and prevention of diseases of children.

DEPARTMENT OF PATHOLOGY AND BACTERIOLOGY

(*Under the temporary direction of Professor W. L. Holman*)

During the past year the Department of Pathology and Bacteriology has lost by death its beloved and most efficient director, Professor Oskar Klotz. A graduate from the Faculty of Medicine of this University in 1902, he returned in 1923 as Professor of Pathology and Bacteriology, and from his wide experience he brought a vigour and inspiration which resulted in the splendid development of this department during his thirteen years in office. He died on the third of November, 1936, and the loss to the faculty and the department he so ably directed has been very great. A further loss suffered by the department was the regretted death of Dr. J. E. Bates. In spite of this weakening of the personnel the work has been carried on by the smaller staff very efficiently, particularly due to the effort and strenuous work of Dr. W. L. Robinson.

The University has been most fortunate in having secured as the new head, Dr. William Boyd of Winnipeg, a man with a world wide reputation, and the department is looking forward to a bright future of sustained and further development.

The main attention and effort of the staff is given to the undergraduate teaching and the routine work which represent the most important part of the duties of this department. The time which the fellows give to teaching and diagnostic work amounts to about twenty-five hours a week. The time for research is thus not only curtailed but is badly broken up, making research work very difficult. Nevertheless a remarkable amount is constantly being accomplished. An increase in the number of fellows would greatly relieve the situation by distributing the ever increasing volume of work among them. The problem of teaching under the continuing handicap of the large number of students in proportion to the available number of the teaching staff has resulted in certain procedures being instituted which it is believed will be useful in keeping up the high standard.

The work of Bacteriology in the third year has incorporated a greater number of tissue sections stained for microorganisms so that the actual site of the agent in the diseased tissue will be more fully appreciated. The Fellow in Bacteriology gives, during each laboratory period, a special demonstration to groups of about thirty, covering material which at present cannot be studied individually by the students. It is necessary to repeat this demonstration-talk five times to cover the entire class, but it is worth the extra work as it is of great value to the students.

In the second semester of the fourth year Pathology course, one lecture hour per week has been replaced by the presentation of fresh gross specimens by the demonstrators as case material to small groups of students. The students are given the opportunity of studying and analyzing the pathological lesions without knowing the clinical history until the end of the period.

The autopsy conferences in the fifth year have been particularly successful in eliciting and maintaining the interest of the students by stimulating their power of observation and analysis of facts. The materials from two autopsies are presented in turn to groups of about fifteen students without any suggestion as to the nature of the lesions or other findings. The class returning to their seats are then questioned as to the clinical picture and other features of each case and only after a full discussion is the history of the case given.

The method of teaching autopsy technique has been somewhat modified. The senior fellow of the Autopsy Division supervises all autopsies. The junior fellows do the autopsies and use a fifth year student to help them in removing and examining the organs. The student takes a few important notes but in addition actually assists in the technical procedures—the complete dictation for the autopsy being recorded in a dictaphone immediately after the autopsy is finished.

The department encourages voluntary assistants who give full-time service and these are given responsibilities similar to the rest of the staff. This policy offers excellent training to those chosen and greatly extends the usefulness of the laboratories. During the summer months opportunities to gain practical experience in the routine laboratories are offered to a few undergraduate students in all the divisions of the laboratories. The number applying for these positions is always more than can be accommodated.

Dr. J. C. Paterson, a fellow in Pathology, resigned his position on April 1st to become Director of Laboratories in the Regina General Hospital, Regina, Saskatchewan. His place was taken by Dr. M. Shaver, who came from the Provincial Laboratories and had been a voluntary assistant in the department. Dr. D. F. Moore, of the division of Surgical Pathology, left on May 1st to become Assistant Pathologist at the Vancouver General Hospital, Vancouver, B.C. Dr. G. L. Duff went abroad on May 1st for four months' postgraduate study in Italian, German and British laboratories.

The value of the detailed studies of the brain and spinal cord, which has become part of the routine work of the laboratories in the division of Neuropathology, is being more widely appreciated. Professor Linell and his staff have made the wealth of material available to all, particularly through weekly clinics and the neurological discussion of individual cases.

In February the Ascheim-Zondek biological test laboratory was transferred from the Department of Physiological Hygiene to the Banting Institute where space was provided and where the pregnancy test is carried out under the supervision of this department and in collaboration with the department of Obstetrics and Gynaecology.

The department, with the co-operation of the Department of Anatomy, has been pleased to assist the newly incorporated Canadian School of Embalming by offering the facilities of the department and by giving a number of lectures and demonstrations. The number of students registered was fifty-two and the success of the undertaking seems assured.

DEPARTMENT OF PATHOLOGICAL CHEMISTRY

(*Under the direction of Professor Andrew Hunter*)

The only change that has taken place in the teaching staff this year is the appointment as Assistant, replacing Mr. L. D. Proctor, of Dr. G. P. Hamblin.

The plan of instruction remains the same as it was last year. Owing to time-table difficulties, part of the fifth year lecture course has to be given three times over to different sections of the class. This is a wearisome task for the lecturer, and it is hoped that it may prove possible to rearrange future timetables so as to avoid it.

Dr. Boddington reports that the change made in the timetable of laboratory work at St. Michael's Hospital continues to operate to the advantage of this Department.

The number of students registered in this Department during 1936-37 was 257. This was made up of 141 fourth year medical students, 114 fifth year medical students, and 2 graduate students.

Seven members of the staff and one voluntary worker have been engaged during the year in research work, a detailed account of which is furnished in a separate report to the President. The number of papers published by the Department has been five.

The Department has continued to make measurements of basal metabolic rate on patients referred to it from certain of the hospital services. During the year, 377 tests have been made on 253 patients. About one-fourth of the tests were on out-patients. Of the patients 222 were surgical, 31 obstetrical or gynaecological.

DEPARTMENT OF PHARMACOLOGY

(*Under the direction of Professor V. E. Henderson*)

The loss of Dr. Roepke at the beginning of the session severely weakened the Department both in teaching and research, nevertheless the teaching has been proceeding fairly satisfactorily. The students have, however, not shown a desire to learn and think things out for themselves.

The research in the Department this year has been proceeding slowly. Dr. Lucas has further continued his studies of the absorption of iron and has contributed to a study of the utilization of iron in the anaemic rat and in children, undertaken by the Department of Paediatrics. A joint paper is now ready for press.

Dr. Rice has made a study of a rare alkaloid, corlumine, and a short communication is in course of preparation.

In conjunction with Mr. A. H. R. Smith, working under a grant from the Banting Research Foundation, an electrical method of recording pulse has been devised and with the aid of Dr. Rice, tested. A preliminary paper on the method is in course of preparation.

In conjunction with Mr. S. F. MacDonald, a study has been made of anaesthesia with the dimethyl and monomethyl cyclopropanes, but unfortunately these compounds appear to be unstable in the animal body and show gradually increasing toxicity, so that our hopes of finding an improvement on cyclopropane have not been fulfilled.

Dr. Lucas, with my aid, has been studying some of the reactions of adrenalin with living tissue and very interesting data have been obtained, the interpretation of which is not at the present possible, but the whole study again reveals our lack of knowledge of the reactions of adrenalin with tissues and the mode by which it acts. This study will be continued.

Seven papers were published by the members of the Department during the past year.

DEPARTMENT OF PHYSIOLOGY

(*Under the direction of Professor C. H. Best*)

The introduction of new courses in biophysics and neurophysiology, conducted by Dr. D. Y. Solandt and Dr. E. H. Botterell, constitutes an important improvement in the teaching of physiology in this Department. It is felt that the instruction given by these new members of the staff rounds out the course and fulfils a need which has been appreciated for some time. The success of the text-book "The Physiological Basis of Medical Practice", written by Professor N. B. Taylor and the Head of the Department, has been very gratifying. A very large share of the credit for the production of this book is due Dr. Taylor. The Head of the Department gave a series of eight lectures in California in May of this year. Addresses were given at Leland Stanford University, the University of California and at the University of Southern California.

The researches on choline and on protamine insulin have progressed favourably. Dr. C. W. V. McCutcheon has collaborated with the Head of the Department in these investigations. Dr. H. E. Woodward has secured very interesting results on the effects of diets deficient in choline, and on the oxygen consumption of liver slices. Dr. E. Fidlar, in collaboration with the head of the technical staff, Mr. F. L. Robinson, has made a large series of very important observations upon the basal metabolic rate and respiratory quotient of rats on diets deficient in choline.

Mr. L. B. Jaques, in addition to completing several undergraduate courses in medicine, has obtained some very interesting results on the mechanism of the clotting of blood.

The greater part of Professor N. B. Taylor's time during the past year has been occupied in preparing the text on applied physiology. Research in his section has been further handicapped by the loss of his two assistants, Dr. C. B. Weld and Dr. J. F. Sykes. Dr. R. E. Haist, having been awarded the George Brown Memorial Scholarship in Medical Science, came into the Department in September to work with Professor Taylor. The loose ends of the work on calcium metabolism which was interrupted last year are being picked up. Work upon intestinal obstruction is also being continued, and a start has been made upon two other problems. The first of these is the effect of ergotoxine upon the central nervous system and peripheral vessels. The other study in project is the relation of the kidney to hypertension. With regard to the latter problem, some time has been spent in attempts to devise a reliable method for the indirect determination of blood pressure in animals.

Research work in the biophysical and neurological aspects of physiology has been carried on by Dr. D. Y. Solandt, Dr. E. H. Botterell and Dr. C. G. Smith. Dr. Smith has been in the Department of Physiology for two years and has now received an appointment in the Department of Anatomy. This group have undertaken a variety of projects in the fields mentioned. Work on the specific effect of ionized calcium on the time-constants of nerve was reported at the October meeting of the Canadian Physiological Society in Kingston, and the clinical implications of the conclusions were discussed. The methods developed by Professor A. V. Hill and Dr. D. Y. Solandt at University College, London, for the measurement of time-constants in nerve have been applied to muscle, and interesting relationships between these values and the ionic environment of the muscle fibres have been found. The measurement of resting heat production, contracture heat production and the potassium ion concentration in the fluid environment of muscle has shown hitherto unsuspected connections between these factors. A method for handling and stimulating single striated muscle fibres and observing the alternation of the muscle "bands", reduced in speed by stroboscopic methods, is at present being developed. Experiments on the time-constants of excitation of normal and regenerated mammalian nerve in the intact animal are being performed. Isolation of these nerves in a moist chamber specially designed for keeping them in good condition during extensive electrical stimulation and the registration of the electrical concomitants of the resulting nerve impulses have been undertaken. Apparatus has been built for the electrical amplification of heart sounds and electrical filters have been designed to cut frequency bands for this sound. This same apparatus is useful for stimulating deafness due to functional discrimination against specific frequency bands. The cathode-ray electrocardiograph has been used for the direct observation of the electrocardiogram in humans and in laboratory animals under various conditions. The application of the cathode-ray tube to electrocardiography has become fairly widespread in England and in Continental Europe, but as yet has received but little attention in North America.

Dr. E. T. Waters and Mrs. J. P. Fletcher have shown that not only is the rate of assimilation of glucose in normal animals increased by intravenously injected fructose, as judged by glucose tolerance tests, but a marked increase is also obtained in completely depancreatized dogs, receiving protamine insulin. This clearly shows that the fructose effect is not due to stimulation of the pancreas, but to increased carbohydrate activity of other tissues of the body, probably of the liver. This finding may provide a simple answer to the highly controversial question: Is fructose used by the diabetic patient more readily than glucose?

Studies on ragweed pollen sensitization have been continued by Dr. A. H. W. Caulfeild and Dr. M. H. Brown. It has been shown that the serum of a guinea-pig sensitized to ragweed pollen gave positive P.K. reactions in human recipients in the same way as serum from a human patient, naturally sensitized to ragweed pollen. This is of considerable theoretical interest as indicating an identity of antibody in two widely differing species. Also, the serum of a sensitized guinea-pig and the serum of a human ragweed pollen patient gave unmistakably positive P.K. reactions in the monkey. Renewed attempts to block anaphylaxis in ragweed pollen sensitized guinea-pigs, by means of the carbohydrate fraction of the pollen, have been completely unsuccessful. Tests were conducted on the isolated uterine strip and also on the intact sensitized animals.

DEPARTMENT OF PSYCHIATRY

(*Under the direction of Professor C. B. Farrar*)

There have been no material changes in undergraduate instruction covering the fourth, fifth and sixth years.

Five candidates successfully completed the one year graduate course in psychiatry in the autumn of 1936, and received the Diploma in Psychiatry established last year in the Faculty of Medicine. Dr. G. E. Hobbs, who stood highest in this course, was awarded the Faulkner medal, being the first to receive this distinction.

During the year liaison arrangements have been made with the Departments of Paediatrics, Psychology and Anthropology, both for the promotion of clinical work and the carrying on of investigations in which there are common interests. The Department is collaborating with the Provincial Department of Health in the experimental investigation of hypoglycemic shock in the treatment of schizophrenia, and with the Department of Medical Research in studying the biochemistry of acute excitements. The staff is represented in a consulting capacity on the staff of the newly established clinic for child psychiatry at the Hospital for Sick Children.

There was held during the academic session a series of clinics in forensic psychiatry through an arrangement with the Department of Law, whereby senior students of that Department attended clinics at the Psychiatric Hospital. Dr. K. G. Gray, fellow in forensic psychiatry, gave in addition, to students in the Department of Law, a course of lectures on psychiatric problems in law.

Staff changes: Dr. Ruth MacLachlan Franks and Dr. S. G. Chalk were added to the teaching staff as demonstrators. Dr. K. G. Gray was appointed fellow in forensic psychiatry. The head of the Department was elected an honorary member of the Verein für Angewandte Psychopathologie und Psychologie (Vienna), and a corresponding member of the Verein für Psychiatrie und Neurologie (Vienna) at the annual 1937 meetings of these societies.

DEPARTMENT OF RADIOLOGY

(*Under the direction of Professor G. E. Richards*)

There have been no changes in the activities of this Department during the year. It is felt that the most pressing need at present is a revision of the teaching schedule in order that the subject may be presented in a manner which is commensurate with its importance. It is hoped this will be possible following the investigation now being conducted into the teaching time-table as a whole. Until something of this sort has been accomplished no further progress can be made, and in the meantime such teaching as has been carried out has followed the lines of previous years, viz., lecture demonstrations during the two final years.

Staff changes include the resignation of Dr. A. D. Irvine, who goes to Edmonton to engage in the practice of radiology.

DEPARTMENT OF SURGERY

(*Under the direction of Professor W. E. Gallie*)

The session 1936-37 has been interesting in the Department of Surgery because of the experiment in summer teaching. On June 15th twelve sixth year students were distributed among the surgical division of the General and St. Michael's Hospitals. They became part of the staff organization and aside from the fact that they had to live out of hospital they did exactly the same work as rotating internes. They wrote all the histories for the hospital records, made all physical examinations and did all the necessary laboratory work. They assisted at all operations on their own patients and followed them to the wards where they did the dressings and made the progress notes. Two days a week they worked in the out-patient department and in the afternoons in the special clinics. At night they were on call for all emergencies coming in under their division. As the surgical work of the hospital is practically as active during the summer months as during the winter, these students had wonderful opportunities for practical clinical training, such as no students in this school ever had before. The result was most gratifying to the Department as we felt that for the first time we had aroused the enthusiasm of the student for practical work. It was satisfactory also because at the examination held in September the students showed clear evidence of the training they had received.

As these students, by taking their surgical training in the summer, were no longer called upon to take the regular ten weeks surgical trimester provided in the ordinary term, we undertook to provide each of them during that ten weeks with whatever special work he most desired. Thus some students spent ten weeks in children's surgery, others in genito-urinary surgery, and some in neuro-surgery or on the cancer wards. The result was much to the student's advantage.

This experiment in summer teaching has been so successful that we propose to repeat it each year. For the Session of 1937-38 sixteen students have applied and are now at work.

Out of the change in clinical teaching in the final year has grown the conviction that a change in the character of the clinical examination is necessary. Hitherto this has consisted of an oral examination held in the spring just before the written examination. Commencing last summer, however, the clinical examination was held at the end of each trimester and this was a decided improvement. It left something to be desired, however, in that this examination is not a satisfactory test of the candidate's ability to face surgical problems and we have decided upon a further change. This year the student's standing in clinical surgery will be based on two tests: first, the impression he has made on the surgeons of the division in which he has taken his training; and, second, the ability he shows in taking the history and making the physical examination of two patients he has not seen before and on the accuracy with which he diagnoses their condition and prescribes treatment. We hope that this change in the character of the clinical examination will eliminate the element of chance which attends all oral examinations and will direct the student to a method of study which will ultimately make him a better doctor.

The reorganization of the surgical staff of the Western Hospital has proved very satisfactory to the Department of Surgery. Throughout the year the students have been in daily attendance at the hospital and the same number of sixth, fifth and fourth year students have been handled there as in one of the surgical divisions at the General and St. Michael's Hospitals. We regret the loss of Dr. H. Mowat, one of the junior surgeons on the staff, who has resigned and gone to accept the appointment of chief surgeon and director of the medical services for the International Nickel Company at Copper Cliff. Dr. Mowat is a very able young surgeon, most thoroughly qualified and trained and he will undoubtedly prove a valuable acquisition to the company and the mining country.

The important experimental and clinical study of the effect of the administration of "heparin" has been continued throughout the year by Dr. Gordon Murray and his assistants. Up to the present this research has been financed by the Connaught Laboratories which have supplied the "heparin", and by the Department of Physiology and the Banting Foundation which have financed special full-time assistants. As the expense of providing heparin free to Dr. Murray has proved too great for the Connaught Laboratories to bear a collapse of the experiment has been prevented by the generosity and interest of Mr. J. S. McLean of Canada Packers, who has undertaken to finance the supply of heparin at the Connaught Laboratories until the clinical study is complete. This study of the action of heparin in preventing thrombosis and embolism in surgical patients, which was suggested by Professor Best and assisted and encouraged by him at all stages has indicated the great value of interdepartmental consultation and co-operation. Both the departments of Physiology and Surgery see in the completion of the study a most important advance in scientific and practical clinical knowledge.

The postgraduate course in abdominal surgery conducted in the last week of September was well attended and proved highly satisfactory to students and staff. Twenty-five doctors, all qualified in surgery, from all parts of the province, attended the course and were occupied for the whole week in lectures, clinics, demonstrations and practical exercises. This coming September, the course will be concerned with fractures.

DEPARTMENT OF THERAPEUTICS

(*Under the direction of Professor R. F. Farquharson*)

The plan of teaching described in previous reports has been further developed. Increasing emphasis has been given to the practical application of therapeutic principles by having each student hand in his full treatment for patients of all kinds presented in weekly clinical lectures to the fifth year. By this method the personal responsibility of the physician to his patient is emphasized and treatment of a wide range of conditions is taken up in practical detail.

Drs. J. C. Sinclair, A. J. Kerwin and F. C. Heal, Senior Internes in Medicine at the Toronto General Hospital, were appointed Assistants in Therapeutics. They have given detailed practical instruction to small groups in the sixth year on technical therapeutic procedures as applied to the medical and nursing care of patients on the medical wards.

Dr. Neil MacGillivray was appointed Research Fellow in Therapeutics. He has studied the results of therapy of all types of leukaemia treated on the medical wards of the Toronto General Hospital in the past ten years. An interesting report of his findings will be published.

As formerly, research work in the Department of Therapeutics has been closely associated with similar activities in the Department of Medicine. The active study of the rsults of therapy in pernicious anaemia is being continued, as is the study of parathyroid tetany and its treatment by continued use of large doses of irradiated ergosterol. Increasing attention is being given to the study of various endocrine disorders and their treatment.

In all the activities of the Department of Therapeutics the active co-operation and advice continuously given by Professor Graham and members of the staff of the Department of Medicine is warmly appreciated.

The organization and teaching of the Sub-Department of Anaesthesia, under the direction of Dr. H. J. Shields, has been continued as in former years.

Instruction in Physical Therapy, including manipulation, has been given, as formerly, by Dr. W. J. Gardiner.

ART SERVICE

(*Under the direction of Miss M. T. Wishart*)

While the influx of work during the past year has been steady, there has come our way little of an outstanding nature.

We have just completed a series of water colour charts for Dr. M. C. Watson, Department of Gynaecology, on the development of the endometrium, to be used at the forthcoming Canadian Medical Association meeting.

Drawings for publication have been completed on subdural haemorrhage for Dr. J. A. Hannah, Neuropathology.

During the year we have been making records of Schick test reactions with a view to working out a standardized colour chart that may be used by the Research Division of the Connaught Laboratories in conjunction with the Department of Public Health.

The type of work coming in throughout the year made it possible to use Miss Blackstock's services (which are limited to work requiring no special knowledge of anatomy) on a part-time basis. This proved very helpful, though it added to our difficulties in the close quarters.

In submitting the list of work accomplished during the past year it is apparent that the output is considerably less than usual. There is no doubt that the loss of one of the Art Service rooms, necessitating all working in one room, is responsible for this. Over and above the awkwardness of a crowded room the loss of privacy, necessary for concentration, is greater yet. An interruption for one has meant an interruption for all. The result has been a poorer quality of work as well as the decreased output mentioned above.

Further, in referring to the yearly published list of work done by the Art Service, Faculty of Medicine, I would like to point out that for some time I have realized it is apt to give an erroneous impression, namely, that one department monopolizes our time more than another. For example, department "A" may have twelve drawings and department "B" only one: the twelve drawings altogether may only have taken one-third of the time spent on the single drawing. Comparison of work done for different departments is inevitable, whereas only a record of time could show the true ratio.

Summary of Work of Art Service

1. According to medium of work:

1. Water-colour	12
2. Half-tone	2
3. Pen and ink	13
4. Crayon drawings	7
5. Black and white diagrams	23
6. Pencil sketches	3
Total	60

2. According to departments:

1. Medicine	29
2. Neuropathology	5
3. Obstetrics and Gynaecology	6
4. Oto-Laryngology	3
5. Pathology, H.S.C.	1
6. Physiological Hygiene	1
7. Surgery	12
8. Surgery, H.S.C.	3
Total	60

3. Number of members of Faculty for whom work was done . 16

REPORT OF THE MEDICAL SOCIETY

Honorary President	Dean W. E. Gallie
Honorary Treasurer	Sir Frederick Banting
President	A. D. Williams
Vice-President	E. B. Tovee
Secretary-Treasurer	V. R. Perry
Assistant Secretary-Treasurer	W. K. Kerr

The Medical Society has completed an eventful and successful year.

Early in the term, the Society undertook to find out difficulties experienced by students in the Medical Course. The aim of this was to aid the Faculty in revising the curriculum. Each year held open meetings in which suggestions were adopted and handed on to the Society. A report of the more significant ideas was drafted and presented to the Faculty by a special committee.

Mr. W. L. M. King was appointed to represent the student body at the meetnig of the American Medical Students' Association at Johns Hopkins University in April.

Under the revised constitution, the Medical Journal had a more profitable year than was previously possible. The undergraduate and graduate subscription has been greatly increased. A further amendment to the constitution was passed at the annual elections, in which subscription was extended to the students in the B. & M. course. The Editorial Board, comprised of Mr. H. Hayward, Editor-in-Chief; Mr. W. G. Bigelow, Associate Editor, and Mr. R. T. Gates, was chiefly responsible for these achievements.

The usual accommodation for the Medical-at-Home was entirely inadequate and the committee experienced great difficulty in allotting tickets to the years and representative bodies. Mr. E. B. Tovee arranged the smoothest entertainment ever offered to medical students, returned a substantial profit, and arranged to expand the at-home for next year.

Three open meetings were held during the year, each with an overflow audience. Dr. E. S. Ryerson addressed the first meeting on "The Medical Student, Past, Present and Future". Dr. Morris Fishbein, Editor of the American Medical Association Journal, at the second meeting described "The Fads and Quackery in Medicine", and Colonel C. H. L. Sharmon, Head of the Narcotics Division, Ottawa, in the final meeting pointed out "What the Medical Student should know about Narcotics". The lectures were interesting, illuminating and enjoyed by students of the first and sixth years alike. Mr. W. I. Breslin was chairman of these meetings.

Following the precedent set last year, Daffydil was presented three nights. The Daffydill Committee, under Mr. I. J. Speigel, seriously considered extending the performance to four nights, to satisfy the demand for tickets, but in the end found it impractical. The entertainment was enjoyed by all who attended and was a financial success.

The Society was called upon to co-operate with the Student Peace Congress. No definite endorsement was given to the principles outlined by that body, but the postulates were passed on to each student to vote as he saw fit.

The surplus of last year's executive was donated to the Bursary fund. A committee comprised of members of the Faculty have been instrumental in securing additional grants from the Board of Governors and distributing the bursaries to deserving students. The retiring executive leaves as a surplus, a high percentage of its funds for bursaries for the coming year.

The allied Medical Athletic Association and Medical Women's Undergraduate Association have shared equally in medical student activities throughout the year. These are reported elsewhere.

The Medical Society wishes to acknowledge the spontaneous interest and valuable assistance given by our Assistant Dean, Dr. Ryerson, in problems encountered during the year.

Mr. E. B. Tovee, who already has an enviable record in academic and extra-curricular activities, is the acclaimed president of the incoming executive.

Medical Athletic Association

Honorary President	Dr. W. L. Robinson
President	W. L. M. King
Vice-President	C. M. Fisher
Secretary-Treasurer	D. A. Garrett

The Medical Athletic Association has brought to a very satisfactory conclusion its activities for the past year.

The chief aim of this Association has always been to have as many undergraduates as possible take part in some form of athletics. In so far as this is concerned, the present Association has been quite as successful as those of other years.

This year a precedent was set, in that the Faculty of Medicine was represented by three basketball teams instead of the customary two. A rough estimate of the number of students from the Faculty of Medicine participating in interfaculty athletics could conservatively be placed at well over two hundred.

More than fifty 'M's' have been awarded for outstanding service on interfaculty or university teams. Still more noteworthy is the large number of undergraduate first 'T's' held by members of our Faculty.

Once again Medicine has garnered its share of interfaculty honours, having won the Volleyball, Baseball, Waterpolo and Gymnastic championships. This is a very enviable record and the students are to be heartily congratulated on their success.

This year the proposed change in regard to the eligibility of men playing on Junior and Senior teams was put into effect, and proved itself very satisfactory. The arrangement now stands that men from the first and second years are eligible for the Junior teams and men from the third, fourth, fifth and sixth years are eligible for the Senior teams.

This year the Athletic Association strongly anticipated holding a Medical Athletic Banquet, at which all the athletic awards were to be formally presented, and in the event of such a banquet the student body would have an opportunity of getting together. It is our belief that something in this nature is greatly needed. Due to financial reasons, this banquet proved to be impossible this year. Owing to our efforts in the saving of equipment, the expenses of next year's Association should be appreciably lessened. In view of this fact, we feel that such a banquet will be possible, and we look forward with great anticipation to this event.

This year the Women's Athletic Association has enjoyed its usual success. These activities were somewhat necessarily confined to the two sports, basketball and tennis. In spite of the small programme, a goodly number of girls derived much enjoyment from their athletic activities.

Medical Women's Undergraduate Association

Honorary President	Dr. A. A. Curtin
President	Geraldine Maloney
Vice-President	Mary Albertson
Secretary	Jean Leeson
Treasurer	Doris Prowse

During the past academic year the Medical Women's Undergraduate Association have met to enjoy many activities.

The first open meeting was for the purpose of initiating the freshettes. The candle-lighting service was impressive and the latter part of the programme seemed to be enjoyed by the sophomores quite as much as by the freshies. Later in the fall, we met at a tea, and had the pleasure of hearing Dr. Victoria Mueller, of St. Michael's, discuss the status of women, and particularly medical women, in contemporary Germany. The Christmas luncheon party was, as usual, a great success. Once again the Newman Club kindly allowed us to use their beautiful rooms for the medical women's At-Home. The At-Home was attended by a large number of the staff, graduate women physicians of the city, and students. The women again took part in Daffydil, in addition to the usual skit, they joined the men in producing the Floradora Chorus. This innovation was a huge success and we hope it will become a permanent feature of Daffydil. The women's Daffydil dinner was an hilarious event, with Dr. John Mann as guest speaker. The final meeting of the year was the party given by the Fifth Year to the graduating class, which was very enjoyable.

Once again we feel that the M.W.U.A. has achieved its purpose in bringing together the women of the different years and encouraging a feeling of solidarity among us.